

KC INDUSTRIES, LLC

2420 Old Highway 60
Mulberry, FL 33860

**MATERIAL SAFETY DATA SHEET
SODIUM FLUOROSILICATE (SFS)****1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION**

COMPANY NAME:
KC Industries, LLC
Old Highway 60
Mulberry, FL 33860

EMERGENCY TELEPHONE NO.:
(863) 425-1195
CHEMTREC (800) 424-9300

TRADE NAME:
Sodium Silicofluoride

IDENTIFICATION NUMBER:
MIF-1

CHEMICAL NAME:
Sodium Fluorosilicate

SYNONYMS:
Sodium Hexafluorosilicate

2. INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>Percent</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>Units</u>
Sodium Silicofluoride	16893-85-9	98+	2.5 (As F-)	2.5 (As F-)	mg/M ³

ACGIH TLVs are based on 1997 values. OSHA PELs are based on the more stringent 1987 values, which were subsequently vacated by the courts. All values are 8-hour time-weighted averages unless otherwise noted.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Product is a white powder with no odor. Dust may cause irritation of eyes, skin, mucous membranes, and respiratory tract. Wear appropriate personal protective equipment. Keep individuals not involved in the clean-up out of the area. Pick up released product with appropriate implements and return to original container if reusable. If not reusable, place in appropriate containers for disposal. Material collected during clean-up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non-hazardous. Prevent from entering storm or sanitary sewers, ground water, or soil. Fluorides are toxic to aquatic and terrestrial flora and fauna. Releases may be reportable to local, state, and/or federal authorities.

POTENTIAL HEALTH EFFECTS:

Eye:	May cause irritation of the eyes.
Skin Contact:	May cause irritation of the skin.
Skin Absorption:	Not known to be absorbed through the intact skin.
Ingestion:	MAY BE FATAL IF LARGE AMOUNTS ARE INGESTED. May cause abdominal pain diarrhea, vomiting, excess salivation, and painful spasms of the limbs.
Inhalation:	May cause irritation of the mucous membranes and respiratory tract and bronchospasms.

Chronic and Carcinogenicity: Prolonged exposure may cause dermatitis. The product has not been identified as a carcinogen or potential carcinogen. Pre-existing skin, lung, central nervous system, and kidney conditions may be aggravated by exposure to the components of the product. Exposure to fluorides at concentrations well above the TLV or PEL may cause a chronic bony fluorosis. See Section 11.

4. FIRST AID MEASURES

Inhalation:	Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention.
Eyes:	Flush with tepid water for at least 20 minutes holding the eyelids wide open. Seek medical attention.
Skin:	Wash thoroughly with mild soap and water. Seek medical attention if irritation or chemical burns develop. Remove any contaminated clothing and launder thoroughly before reuse.
Ingestion:	SEEK MEDICAL ATTENTION IMMEDIATELY. Give water to dilute. Do not induce vomiting unless directed by licensed medical personnel. Advise medical personnel of possible fluoride exposure.

5. FIRE FIGHTING MEASURES

Flash Point: NA LEL: NA UEL: NA Auto Ign. Temp.: NA

Product will not burn. Material in or near fires should be cooled with a water spray or fog if compatible with fire fighting techniques for the other materials involved in the fire. A self-contained breathing apparatus operating in the positive pressure mode and full fire fighting gear should be worn for combating fires. Water used to fight fires should be contained. See Section 12.

6. ACCIDENTAL RELEASE MEASURES

Pick up released product with appropriate implements and return to original container if reusable. If not reusable, place in appropriate containers for disposal. Appropriate personal protective equipment cited in Section 8 should be worn during all clean-up operations. Although the product itself is non-hazardous, material collected during clean-up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non-hazardous. Releases may be reportable to local, state, and/or federal authorities. See Sections 12 & 15.

7. HANDLING AND STORAGE

Do not store with or near incompatible materials cited in Section 10. Store in tightly closed containers out of contact with the elements. Appropriate personal protective equipment cited in Section 8 should be worn during handling. Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. Wet mopping or vacuuming is recommended to clean up any dusts that may be generated during handling and processing. Wash hands and face thoroughly before eating, drinking or smoking.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation should be provided to maintain exposures below the limits cited in Section 2. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practice" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI, 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Respiratory Protection: If exposures may exceed the limits cited in Section 2, use, as a minimum, a NIOSH approved 1/2 face-piece respirator with cartridges approved for particulate matter with an exposure limit of not less than 0.05 mg/M³. If exposures exceed 10 times the limits cited in Section 2, consult your respiratory protection equipment supplier or a professional industrial hygienist for selection of the proper equipment. The evaluation of the need for respiratory protection should be made by a professional industrial hygienist.

Eye Protection: Chemical protective goggles are recommended where there is the possibility of eye contact with the product. Safety glasses with side-shields are recommended for all other operations.

Protective Gloves: Polymeric gloves are recommended to prevent possible irritation. PVC, neoprene, or similar materials are recommended.

General: A polymeric coated apron or other body covering is recommended where regular work clothing may become contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND PHYSICAL STATE:
White Powder

OCTANOL/WATER PARTITION COEFFICIENT:
NA

VAPOR DENSITY (AIR =1): NA

MELT POINT: Decomposes at 932° F (500° C)

VAPOR PRESSURE: NA

EVAPORATION RATE (BUTYL ACETATE = 1): NA

ODOR: None

SPECIFIC GRAVITY/BULK DENSITY: 85-90 Lb/ft³

% VOLATILE BY VOLUME: Not Volatile

BOILING POINT: NA

% SOLUBILITY (H₂O): 0.65g/100 g at 63° F.

pH: 6.5 - 7.5 (Saturated Solution)

10. STABILITY AND REACTIVITY

Stability & Polymerization: Product is stable. Hazardous polymerization will not occur.

Incompatibility (Conditions to Avoid): Do not store with or near strong acids or alkaline materials. Avoid contact with iron-containing materials. May react with strong mineral acids to liberate hydrogen fluoride gas or hydrofluoric acid which are highly toxic and corrosive.

Hazardous Decomposition Products: Temperatures above 500C, such as fires, will cause decomposition and formation of Hydrofluoric Acid and Fluorine. .

Special Sensitivity: None that are known.

11. TOXICOLOGICAL INFORMATION

The acute lethal oral toxicity for rats is approximately 125 mg per kilogram of body weight. This is equivalent to approximately 6.5 grams for the average human. Chronic bony fluorosis is a very rare condition and is not expected to develop if exposures are maintained below mandated or recommended exposure limits.

12. ECOLOGICAL INFORMATION

N/P

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State, and Local Regulations.
Contact CHEMTREC AT 1-800-424-9300 FOR 24 HOUR EMERGENCY ASSISTANCE.
Hazardous Waste Number NOT LISTED.

14. TRANSPORTATION INFORMATION

DOT Proper Shipping Name: Sodium Fluorosilicate; Packing Group III; Hazard Class: 6.1 (POISON);
SUBSIDERARY HAZARD CLASS: N/A UN 2774; Reportable Quantity N/A; Placarding Requirement: Keep away from Food; IMDG Placarding Requirement: TOXIC. For International Transportation, Sodium Fluorosilicate is regulated by International Maritime Organization (IMO) and International Air Transport Association (IATA) for Vessel and Air Movement as Class 6.1 TOXIC, Not marked as Marine Pollutant, (IMDG PG. 6250). Packing, Marking, Labeling, Shipping Paper descriptions must precisely reflect the regulation for export movement.

15. REGULATORY INFORMATION

SARA Title III Information:

NOT LISTED. NO RQ

Federal Regulatory Information:

RCRA STATUS OF UNUSED MATERIAL IF DISCARDED: NOT LISTED. HAZARDOUS WASTE NUMBER: NOT LISTED. WASTE DISPOSAL METHOD: DISPOSER MUST COMPLY WITH FEDERAL, STATE, AND LOCAL DISPOSAL AND DISCHARGE LAWS. EPA HAZARDOUS SUBSTANCE: NO. TOXIC SUBSTANCES CONTROL ACT INVENTORY OF SUBSTANCES (TSCA): YES, LISTED.

State Regulatory Information:

NEW JERSEY "RIGHT TO KNOW" LAWS: LISTED.

16. OTHER INFORMATION

Not Est. = Not Established; NA = Not Applicable; ND = Not Determined

Preparation /Revision Date: 3/17/2000 – 03/08/2005

IMPORTANT SAFETY NOTICE

The information contained in the Material Safety Data Sheet relates only to the specific material(s) described herein and does not relate to use in combination with any other material or substance or in any process. We believe that the information contained herein is current as of the date of issue of this Material Safety Data Sheet. *Because the use of this information and these opinions and the conditions of use of this product are not within the control of KC Industries, LLC, it is the user's obligation to determine the conditions of safe use of the product.*

Users of this product should study this Material Safety Data Sheet and become aware of the product hazards and safety information before using the product. Users should also notify their employees, agents, and contractors regarding information contained in this Material Safety Data Sheet and any product hazards and safety information in order to provide safe use of this product.